

Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

525, 852

PCT/EP2003/008204



| | | |
|---|---|--|
| Applicant's or agent's file reference 01045PW0 | FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416) | |
| International application No. PCT/EP2003/008204 | International filing date (<i>day/month/year</i>) 25 July 2003 (25.07.2003) | Priority date (<i>day/month/year</i>) 30 August 2002 (30.08.2002) |
| International Patent Classification (IPC) or national classification and IPC A61F 5/00 | | |
| Applicant HUBER, Vitus, Maria | | |

| | |
|---|--|
| <p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>5</u> sheets, including this cover sheet.</p> <p><input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of <u>10</u> sheets.</p> | |
| <p>3. This report contains indications relating to the following items:</p> <p>I <input checked="" type="checkbox"/> Basis of the report</p> <p>II <input type="checkbox"/> Priority</p> <p>III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p>IV <input type="checkbox"/> Lack of unity of invention</p> <p>V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input type="checkbox"/> Certain observations on the international application</p> | |

| | |
|--|--|
| Date of submission of the demand 29 March 2004 (29.03.2004) | Date of completion of this report 09 February 2005 (09.02.2005) |
| Name and mailing address of the IPEA/EP | Authorized officer |
| Facsimile No. | Telephone No. |

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP2003/008204

I. Basis of the report

1. With regard to the elements of the international application:*

- ☐ the international application as originally filed
- ☒ the description:
 pages 1-25, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☒ the claims:
 pages _____, as originally filed
 pages _____, as amended (together with any statement under Article 19
 pages _____, filed with the demand
 pages 1-50, filed with the letter of 28 January 2005 (28.01.2005)
- ☒ the drawings:
 pages 1/20-20/20, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☐ the sequence listing part of the description:
 pages _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/fig _____

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP 03/08204

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

| | | | |
|-------------------------------|--------|------|-----|
| Novelty (N) | Claims | 1-50 | YES |
| | Claims | | NO |
| Inventive step (IS) | Claims | 1-50 | YES |
| | Claims | | NO |
| Industrial applicability (IA) | Claims | 1-50 | YES |
| | Claims | | NO |

2. Citations and explanations

Reference is made to the following document:

D1: US-A-1 183 062 (WH DE FORD) 16 May 1916 (1916-05-16)

Document D1 is considered the prior art closest to the subject matter of claim 1. It discloses (the references in parentheses are to D1):

Orthopedic device for correcting distortions of the toes (page 1, lines 9-17), having a first fastening system (9, 10; page 1, lines 67-77; figures 1-3) in the region of the big toe (B, figure 1), a second fastening system (2, 3; page 1, lines 45-59) in the region of the metatarsus (C, figure 1) and a flexible splint (8; page 1, lines 64-72; figures 1-3), which is retained by the fastening systems (9, 10, 2, 3; page 1, lines 67-77 and lines 45-59; figures 1-3) and extends along the inner side of the foot, characterized in that the flexible splint (8; page 1, lines 64-72; figures 1-3) is configured as a hinged flexible splint that is articulated (13-15; page 1, lines 77-86; figures 1 and 2) in the direction of flexion-extension of the toe or toes to be corrected.

The subject matter of claim 1 thus differs from this known document D1 in that the orthopedic device has a flexible

splint (9) with a hinge device (13) having a swiveling axis (12), which corresponds approximately to the articulated axis of the metatarsal phalangeal joint of the big toe (see figure 1 of the application).

Therefore, the subject matter of claim 1 is novel (PCT Article 33(2)).

The problem to be solved can thus be seen as that of providing an articulated orthopedic device with a compact design of the hinge and improved wearing comfort so as to avoid chafing, blisters and sore feet in the patient.

This problem is solved by the claimed articulated orthopedic device with an articulated axis that aligns with that of the big toe joint such that the relative movement between the surface of the skin of the inner foot and big toe and the adjacent device surfaces is minimized and abrasion and chafing injuries are thus avoided.

The proposed solution is not obvious. None of the search report citations suggests this type of solution to the problem of interest. Although document US-A-1183062 discloses an orthopedic device for correcting distortions of the toes by means of a hinged flexible splint that is articulated in the direction of flexion-extension of the toe to be corrected, there is no suggestion of the solution according to claim 1 wherein the splint hinge is arranged such that it follows the flexion-extension movement in the axis of the toe joint.

Claims 2-50 are dependent upon claim 1 and thus likewise satisfy the PCT requirements with respect to novelty and inventive step.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.
PCT/EP 03/08204

It should be noted:

Claim 27 refers to itself and thus does not satisfy the requirements of PCT Article 6, since the subject matter for which protection is sought is not clearly defined.